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EXAMINER

CHEVALIER, ALICIA ANN

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/855,194

Applicant(s)

THOMAS, OOMMAN  
PAINUMOOTTIL

Examiner

Alicia Chevalier

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 September 2003 and 29 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16, 18, 19 and 21-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16, 18, 19 and 21-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 14-22.                      6) ☐ Other: \_\_\_\_\_

## **RESPONSE TO AMENDMENT**

### ***WITHDRAWN REJECTIONS***

1. The 35 U.S.C. §102 rejection of record in paper #10, pages 2-3, paragraph #5 have been withdrawn due to Applicant's amendment in paper #11.
2. The 35 U.S.C. §103 rejection of record in paper #10, pages 3-4, paragraphs #6 and #7 have been withdrawn due to Applicant's amendment in paper #11.

### ***NEW REJECTIONS***

3. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

### ***Claim Rejections - 35 USC § 103***

4. Claims 1-3, 6, 8, 11-16, 18, 21-25, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruemmer et al. (5,582,606) in view Sauer (6,121,510).

Bruemmer discloses an absorbent article, such as infant diapers, training pants, adult incontinence products, and the like, comprising leg cuffs and containment flaps (col. 1, lines 10-31).

Regarding claim 1, Bruemmer discloses a containment flap that reads on Applicant's claimed elastomeric laminate. The containment flap comprises a web having a first major surface and a second major surface and multiple strands of elastomeric material secured to the first major surface of the web (col. 9, lines 12-18 and figure 13). Furthermore, the containment

flap comprises two different types of elastic strands, the flap elastic and the fold line flap elastic that are made of different materials (col. 9, lines 33-36).

Bruemmer teaches that the containment flap may be made of the same material as the bodyside liner (col. 9, lines 40-42), such as porous foams, reticulated foams, apertured plastic films, natural fibers, synthetic fibers, non-woven or woven fabrics, etc. (col. 3, line 59 bridging col. 4, line 21).

Bruemmer fails to disclose that the web in the containment flap includes at least one of multi-block elastomeric copolymers, polyurethanes, polyamides, or metallocene-catalyzed polyolefins.

Sauer also discloses an absorbent article, such as diapers, comprising containment flaps (col. 1, lines 5-12). The containment flap comprises a film having a first major surface and a second major surface and a least one strand of elastomeric material secured to the first major surface of the elastomeric film (col. 10, lines 12-30 and figure 4). A wide range of materials are suitable for use as the containment flap, such as non-woven materials, a film material such as polyurethane film, a foam material or combinations there of (col. 9, lines 12-24). These materials render the containment flap hydrophobic and are resistant to the flow of liquids to prevent leaks (col. 9, lines 25-37)

Sauer shows that non-woven materials, polyurethane film, and foam material are equivalent materials known in the art. Therefore because these materials were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute a polyurethane film for the foam or non-woven fabric containment flap web of Bruemmer. One of ordinary skill in the art at the time of the invention would have been

motivated to use a polyurethane film because of the hydrophobic nature of the material, which would help with the resistance to the flow of liquids and prevent leaks.

Regarding claim 2, Bruemmer discloses that the elastic strands may be formed from Lycra (col. 9, lines 37-39). Lycra is a spandex fiber, which is a generic name for fiber-forming substance composed at least 85% of polyurethane a thermoplastic polymer.

Regarding claim 3, Sauer discloses that the elastomeric film is a polyurethane film (col. 9, lines 12-24), which is a thermoplastic material.

Regarding claim 6, since Bruemmer discloses that the elastic strands are formed from Lycra (col. 9, lines 37-39), a polyurethane material and Sauer discloses that the elastomeric film is a polyurethane film (col. 9, lines 12-24), the elastomeric composition of the strand material is the same as the elastomeric composition of the film material.

Regarding claims 8, 14, and 28, Bruemmer discloses that the containment flap web is fold over forming two layers that sandwich the elastomeric strands (figure 13), which is equivalent to Applicant's claimed structure of an elastomeric film and facing sheet sandwiching the elastomeric strands.

Regarding claim 11, Bruemmer discloses a garment, i.e. a diaper, incorporating the elastomeric laminate, i.e. the containment flap, into the structure of the garment (col. 1, lines 10-31 and figure 13).

Regarding claims 12 and 13, Bruemmer discloses the garment is a personal care garment, i.e. a diaper (col. 1, lines 10-31).

Regarding claims 15, 16 and 18, Bruemmer discloses that the elastic strands may provide different constrictive forces (col. 9, lines 33-36), which provide at least two different portions of

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the elastomeric film and elastomeric strands to exhibit amounts of elastic tension that differ from one another.

Regarding claims 21-23, from figure 13 in Bruemmer it can be seen that the elastomeric strands are arranged in groups, wherein there is nonperiodic spacing between the groups and periodic spacing within the group.

Regarding claims 24 and 25, Bruemmer discloses the containment flap comprises two different groups of elastic strands, the flap elastic and the fold line flap elastic that are made of different materials (col. 9, lines 33-36 and figure 13), which exhibit different amounts of elastic tension from each other (col. 9, lines 33-36). From figure 13, it can be seen that the groups have different spacing between their elastomeric strands.

Regarding claim 27, Bruemmer discloses that the containment flap web is fold over forming two layers that sandwich the elastomeric strands (figure 13), which is equivalent to Applicant's claimed structure of an elastomeric film and second elastomeric film sandwiching the elastomeric strands.

5. Claims 4, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bruemmer et al. (5,582,606) in view Sauer (6,121,510) as applied to claims 1-3, 6, 8, 11-16, 18, 21-25, 27 and 28 above, and further in view of Sauer (5,527,300).

Bruemmer and Sauer '510 disclose all the limitations of the instant claimed invention except for either the elastomeric strand material or elastomeric film material made comprising a thermoset polymer and the strand material and the film material are different.

Sauer '300 discloses an absorbent article for incontinence garment or disposable diapers (col. 1, lines 17-26). The absorbent article comprises a plurality of elastic strands, which can be composed of synthetic thermoplastic elastomers, or thermoset polymers (col. 18, lines 8-21).

It would have been obvious to one of ordinary skill in the art to use thermoset material as the strands in Bruemmer because Sauer '300 discloses that they are equivalent materials for use in the art. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a thermoset material for the elastomeric film material or have different compositions for the strands and the elastomeric film, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use.

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bruemmer et al. (5,582,606) in view Sauer (6,121,510) as applied to claims 1-3, 6, 8, 11-16, 18, 21-25, 27 and 28 above, and further in view of Melbye et al. (5,681,302).

Bruemmer and Sauer disclose at least two of the elastic strands have thicknesses that differ from one another.

Melbye discloses an elastic sheet composite, which is incorporated in disposable garments such as diapers, training pants, or adult incompetence briefs (col. 1, lines 43-47). The elastic sheet composite comprises a first flexible sheet, a plurality of elongate elastic strands, and a second flexible sheet (figure 6). The elongate elastic strands comprise a thermoplastic material (col. 1, lines 63-67).

Melbye discloses and shows in figure 8 using different variations in the spacing and diameters of the strands that can cause the elastic sheet composite when stretched longitudinally

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of its strands to be under greater or lesser tensions across its width normal to the strands depending on the spacing and or diameters of the strands.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use different diameter elastomeric strands as disclosed in Melbye as the elastic strands of Bruemmer because of the increased ability for the strands to accommodate tension in different directions on the garment.

7. Claims 1-3, 6, 8-16, 18, 21 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richardson (H1420) in view of Bruemmer et al. (5,582,606).

Richardson discloses a disposable absorbent product such as diapers (col. 2, lines 45-50).

Regarding claims 1, 8, 9 and 28, Richardson discloses an absorbent article comprising an elastomeric laminate. The laminate comprises a an elastomeric film of polyurethane having a first major surface and a second major surface and multiple strands of elastomeric material secured to the first major surface of the elastomeric film (col. 4, lines 20-33, col. 13, lines 65-68 and col. 15, line 54 bridging col. 16, line 4). Both major surfaces of the laminate are covered with facing sheets, i.e. the backsheet and the topsheet (figure 3).

Richardson fails to disclose that at least two of the elastomeric strands have composition that differ from one another.

Bruemmer discloses an absorbent article, such as infant diapers, training pants, adult incontinence products, and the like, comprising leg cuffs and containment flaps (col. 1, lines 10-31). The containment flap comprises a web having a first major surface and a second major surface and multiple strands of elastomeric material secured to the first major surface of the elastomeric film (col. 9, lines 12-18 and figure 13). Furthermore, the containment flap comprises



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two different types of elastic strands, the flap elastic and the fold line flap elastic that are made of different materials and provide different constrictive forces which helps prevent fluid from leaking (col. 9, lines 33-36 and summary of the invention).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use two different materials as taught by Bruemmer as the strands of Richardson because it would provide the absorbent article of Richardson with the ability to provided different constrictive forces. One of ordinary skill in the art would be motivated to provide different constrictive forces in an absorbent article to help the article fit the user better in order to prevent fluid from leaking out of the diaper.

Regarding claim 2, Bruemmer discloses that the elastic strands may be formed from Lycra (col. 9, lines 37-39). Lycra is a spandex fiber, which is a generic name for fiber-forming substance composed at least 85% of polyurethane a thermoplastic polymer.

Regarding claim 3, Richardson discloses that the elastomeric film is a polyurethane film (col. 13, lines 65-68), which is a thermoplastic material.

Regarding claim 6, since Bruemmer discloses that the elastic strands are formed from Lycra (col. 9, lines 37-39), a polyurethane material and Richardson discloses that the elastomeric film is a polyurethane film (col. 13, lines 65-68), the elastomeric composition of the strand material is the same as the elastomeric composition of the film material.

Regarding claim 10, Richardson discloses that the topsheet (facing sheet) is a spunbond sheet (col. 9, lines 50-51).

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Regarding claims 11-14, Richardson discloses a personal care garment, i.e. a diaper, incorporating the elastomeric laminate into the structure of the garment (summary of the invention).

Regarding claims 15, 16 and 18, Bruemmer discloses that the elastic strands may provide different constrictive forces (col. 9, lines 33-36), which provide at least two different portions of the elastomeric film and elastomeric strands to exhibit amounts of elastic tension that differ from one another.

Regarding claim 21, from figures 1 and 3 in Richardson it can be seen that the elastomeric strands have periodic spacing.

8. Claims 1-3, 7-16, 18, 21 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beitz et al. (6,248,097) in view of Bruemmer et al. (5,582,606).

Beitz discloses an absorbent article, such as diapers, comprising containment flaps (col. 1, lines 5-33).

Regarding claims 1, 8, 9, 26 and 28, Beitz discloses a containment flap that reads on Applicant's claimed elastomeric laminate. The laminate comprises a an elastomeric film of polyamide having a first major surface and a second major surface and multiple strands of elastomeric material secured to the first and second major surface of the elastomeric film (col. 18, lines 58-61 and figure 6 reference numbers 174 and 138). Both major surfaces of the laminate are covered with facing sheets, i.e. the gusset-flap fabric layer (figure 6 reference numbers 176 and 170).

Beitz fails to disclose that at least two of the elastomeric strands have composition that differ from one another.

Bruemmer discloses an absorbent article, such as infant diapers, training pants, adult incontinence products, and the like, comprising leg cuffs and containment flaps (col. 1, lines 10-31). The containment flap comprises a web having a first major surface and a second major surface and multiple strands of elastomeric material secured to the first major surface of the elastomeric film (col. 9, lines 12-18 and figure 13). Furthermore, the containment flap comprises two different types of elastic strands, the flap elastic and the fold line flap elastic that are made of different materials and provide different constrictive forces which helps prevent fluid from leaking (col. 9, lines 33-36 and summary of the invention).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use two different materials as taught by Bruemmer as the strands of Beitz because it would provide the containment flap of Beitz with the ability to provided different constrictive forces. One of ordinary skill in the art would be motivated to provide different constrictive forces in an absorbent article to help the article fit the user better in order to prevent fluid from leaking out of the diaper.

Regarding claim 2, Bruemmer discloses that the elastic strands may be formed from Lycra (col. 9, lines 37-39). Lycra is a spandex fiber, which is a generic name for fiber-forming substance composed at least 85% of polyurethane a thermoplastic polymer.

Regarding claim 3, Beitz discloses that the elastomeric film is a polyamide film (col. 18, lines 58-61), which is a thermoplastic material.

Regarding claim 7, since Bruemmer discloses that the elastic strands are formed from Lycra (col. 9, lines 37-39), a polyurethane material and Beitz discloses that the elastomeric film

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is a polyamide film (col. 18, lines 58-61), the elastomeric composition of the strand material is the different from the elastomeric composition of the film material.

Regarding claim 10, Beitz discloses that the fabric layer (facing sheet) is a spunbond sheet (col. 19, lines 31-36).

Regarding claims 11-14, Beitz discloses a personal care garment, i.e. a diaper, incorporating the elastomeric laminate into the structure of the garment (col. 1, lines 5-33).

Regarding claims 15, 16 and 18, Bruemmer discloses that the elastic strands may provide different constrictive forces (col. 9, lines 33-36), which provide at least two different portions of the elastomeric film and elastomeric strands to exhibit amounts of elastic tension that differ from one another.

Regarding claim 21, from figure 6 in Beitz, it can be seen that the elastomeric strands have periodic spacing.

### ***ANSWERS TO APPLICANT'S ARGUMENTS***

9. Applicant's arguments filed in paper #11 regarding the 35 U.S.C. §102 and §103 rejections of record have been considered but are moot since the rejections have been withdrawn.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Davis et al. (5,906,637) discloses a similar elastomeric laminate.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (703) 305-1139.

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The Examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 5:00 p.m. The Examiner can also be reached on alternate Fridays

If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, Harold Pyon can be reached by dialing (703) 308-4251. The fax phone number for the organization official non-final papers is (703) 872-9306. The fax number for after final papers is (703) 872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose phone number is (703) 308-0661.

ac

11/14/03

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

11/14/03